DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-011575 Address: 333 Burma Road **Date Inspected:** 24-Jan-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** OBG Trail Assembly

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) Trial Assembly Areas

Segment 6CW (Bottom Panel Connecting Clips)

This Quality Assurance (QA) Inspector witnessed final tension verification for Clips connecting Bottom Panel T-ribs to the Floor Beam at Bottom Panel at Panel Point (PP) 44, PP 45, PP 46 and PP 47 for Segment 6CW. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00241 Dated January 24, 2010.

Bolt sizes used were M16 x 45 RC Set# DHGM160001 and final torque required was 210 N-m and

Bolt sizes used were M16 x 65 RC Set# DHGM160006 and final torque required was 180 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-114.

Segment 6CW (Side Panel Cross Beam Side Connecting Clips)

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This Quality Assurance (QA) Inspector witnessed final tension verification for Clips connecting Side Panel Cross Beam Side T-ribs to the Floor Beam at Panel Point (PP) 44, PP 45 and PP 46 for Segment 6CW. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00241 Dated January 22, 2010.

Bolt sizes used were M16 x 50 RC Set# DHGM160003 and final torque required was 200 N-m and

Bolt sizes used were M16 x 65 RC Set# DHGM160006 and final torque required was 180 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-114.

Segment 6AW (Side Panel Counter Weight Side Connecting Clips)

This Quality Assurance (QA) Inspector witnessed final tension verification for Clips connecting Side Panel Counter Weight Side T-ribs to the Floor Beam at Panel Point (PP) 44, PP 45, PP 46 and PP 47 for Segment 6CW. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00231 Dated January 10, 2010.

Bolt sizes used were M16 x 45 RC Set# DHGM160001 and final torque required was 210 N-m and

Bolt sizes used were M16 x 65 RC Set# DHGM160006 and final torque required was 180 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-114.

Segment 5AW to 5BW

This QA Inspector performed Individual Inspection with Caltrans QA Manikandhan for the Skin Flatness across Transverse Splice Joints at Location B1, B2, B3, B4, T1 and T2 for Segment 5AW to 5BW re-confirming the reading taken by ABF against the RFI No. ABF-RFI-001869 Rev.2 Dated Jan 14, 2010. Observed at T1 5mm in 5000mm, T2=5mm in 5000mm, B1, B2 and B3 confirms the same as submitted and B4 7mm in 5000mm.

Segment 5BW to 5CW

This QA Inspector performed Individual Inspection with Caltrans QA Manikandhan for the Skin Flatness across Transverse Splice Joints at Location B1, B2, B3, B4, T1 and T2 for Segment 5BW to 5CW re-confirming the reading taken by ABF against the RFI No. ABF-RFI-001869 Rev.2 Dated Jan 14, 2010. Observed at T1, T2, B1, B2, B3 and B4 confirms the same as submitted.

Segment 5AE to 5BE

This QA Inspector performed Individual Inspection with Caltrans QA Manikandhan for the Skin Flatness across Transverse Splice Joints at Location B1, B2, B3, B4, T1 and T2 for Segment 5AE to 5BE re-confirming the

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reading taken by ABF against the RFI No. ABF-RFI-001869 Rev.2 Dated Jan 14, 2010. Observed at T1, T2, B1, B2, B3 and B4 confirms the same as submitted.

Segment 5BE to 5CE

This QA Inspector performed Individual Inspection with Caltrans QA Manikandhan for the Skin Flatness across Transverse Splice Joints at Location B1, B2, B3, B4, T1 and T2 for Segment 5BE to 5CE re-confirming the reading taken by ABF against the RFI No. ABF-RFI-001869 Rev.2 Dated Jan 14, 2010. Observed at T1, T2, B1, B3 and B4 confirm the same as submitted and at B2 9mm in 5000mm.

Segment 6AE to 6BE

This QA Inspector performed Individual Inspection with Caltrans QA Manikandhan for the Skin Flatness across Transverse Splice Joints at Location B1, B2, B3, B4, T1 and T2 for Segment 6AE to 6BE re-confirming the reading taken by ABF against the RFI No. ABF-RFI-001869 Rev.2 Dated Jan 14, 2010. Observed at T1, T2, B1, B2, B3 and B4 confirm the same as submitted.

Segment 6BE to 6CE

This QA Inspector performed Individual Inspection with Caltrans QA Manikandhan for the Skin Flatness across Transverse Splice Joints at Location B1, B2, B3, B4, T1 and T2 for Segment 6BE to 6CE re-confirming the reading taken by ABF against the RFI No. ABF-RFI-001869 Rev.2 Dated Jan 14, 2010. Observed at T1, T2, B1, B2, B3 and B4 confirm the same as submitted.

Segment 6AW to 6BW

This QA Inspector performed Individual Inspection with Caltrans QA Manikandhan for the Skin Flatness across Transverse Splice Joints at Location B1, B2, B3, B4, T1 and T2 for Segment 6AW to 6BW re-confirming the reading taken by ABF against the RFI No. ABF-RFI-001869 Rev.2 Dated Jan 14, 2010. Observed at T1, T2, B1 and B2 confirm the same as submitted at B3 9mm in 5000mm and at B4 5mm in 5000mm.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact, who represents the Office of Structural Materials for your project.

Inspected By:	Math, Manjunath	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer